

Impacts of Fracking in North and South America

Pathways of Contamination and Human Health Impacts

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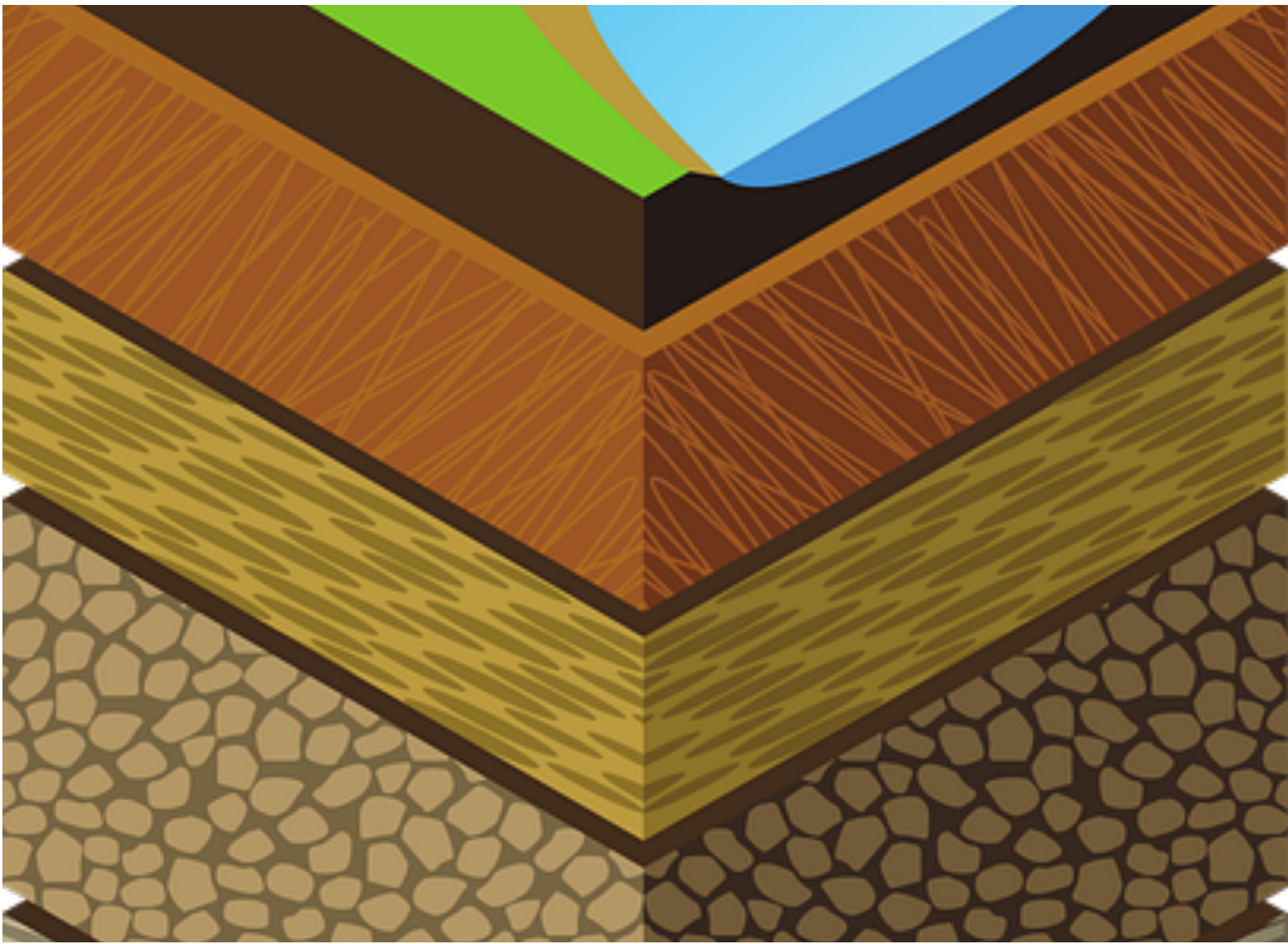
Addressing health impacts

Is there a problem? Can we do something about the problem?

Should we do something about the problem?

- Highly toxic chemicals used to drill and frack wells to extract unconventional oil and gas
- Methane, brine, and additional liquid and gaseous toxins released from fracked wells
- Multiple pathways of contamination (air, water, and waste)
- Exposures to plants, animals, and people
- Very worrisome plant and animal models of disease following exposure
- Accumulating weight of studies showing harmful human health impacts







Human health impacts related to fracking

Evidence for adverse impacts in virtually every major organ system!

- Premature death
- Heart attacks, heart failure, and ischemic heart disease
- Asthma and other respiratory diseases
- Cancer (including acute lymphocytic leukemia in children)
- Skin lesions (resembling chemical burns)
- Difficult pregnancies and infants born preterm, at low birth weight, and with congenital malformations
- Neurologic and psychologic injuries (seizures, anxiety,

Studies from around the world

Impacts at local, regional, national, and global levels

- United States
- Canada
- Argentina
- England and Ireland
- Europe
- China
- Australia

Prevent illness and death

Prevent exposures

- Cannot prevent subsurface fractures and interconnections
- Cannot prevent leaks of gases at well heads
- Cannot prevent leaks and spills of liquids and waste during transport and storage
- Adequate “set-back” distances have not been determined, and adequate separation may not be possible
- Treatment of fracking-related illnesses may be difficult or impossible
- **Prevent exposures by minimizing or eliminating fracking activities**

